

On the shock wave front speed under high-voltage electric discharge in water

Akhmetov M., Akhmetov N., Gimadeev M., Krivosheev V.
Kazan Federal University, 420008, Kremlevskaya 18, Kazan, Russia

Abstract

© 2017, Pleiades Publishing, Ltd. The pressure wave propagation under high-voltage electric discharge in water was investigated experimentally. The shock wave front speed was determined for the considered range of parameters.

<http://dx.doi.org/10.1134/S1063780X17030023>

References

- [1] K. A. Naugol'nykh and N. A. Roi, *Electric Discharges in Water* (Nauka, Moscow, 1971) [in Russian].
- [2] G. A. Gulyi, *Science Fundamentals of Pulsed-Discharge Technologies* (Naukova Dumka, Kiev, 1990).
- [3] P. P. Malyushevskii, *Fundamentals of Pulsed-Discharge Technology* (Naukova Dumka, Kiev, 1983).
- [4] G. N. Gavrilov, G. G. Gorovenko, P. P. Malyushevskii, and A. G. Ryabinin, *Pulsed-Discharge Technology of Treatment of Minerals* (Naukova Dumka, Kiev, 1979).
- [5] Yu. S. Yakovlev, *Hydrodynamics of Explosion* (Sudpromgiz, Leningrad, 1961).
- [6] *Physics Pocket Book*, Ed. by H. Ebert (Oliver & Boyd, Edinburgh, 1967).
- [7] N. D. Akhmetov, V. N. Drulis, M. M. Gimadeev, V. A. Krivosheev, and T. V. Rzaeva, *Izv. Vyssh. Uchebn. Zaved., Aviatsionnaya Tekh.*, No. 1, 77 (2011).
- [8] M. N. Akhmetov, N. D. Akhmetov, M. M. Gimadeev, V. N. Drulis, V. A. Krivosheev, and T. V. Rzaeva, *Nauch.-Tech. Vestn. Povolzh'ya*, No. 6, 124 (2012).